In the claims:

All claims in the application are indicated below.

1. (Currently amended) A data output method for rendering at one or more output devices data content accessed from ~~an~~ mobile information apparatus, comprising:

establishing a communication channel between the mobile information apparatus and the one or more output devices, the communication channel including a radio frequency wireless communication channel at the mobile information apparatus;

receiving at the mobile information apparatus over the communication channel one or more attributes corresponding to the one or more output devices;

selecting at the mobile information apparatus the one or more output devices for rendering the data content based at least in part on the one or more attributes; and

delivering the data content to the one or more selected output devices for rendering.

2. (Cancelled) The method of claim 1 in which the communication channel includes a wireless communication channel.

3. (Currently amended) The method of claim 1 in which the data content resides in the mobile information apparatus.

4. (Currently amended) The method of claim 1 further including obtaining the data content from a data source distinct from the mobile information apparatus.

5. (Currently amended) The method of claim 1 further comprising obtaining authentication information from the mobile information apparatus and authenticating permission for the mobile information apparatus to access the one or more output devices.

6. (Currently amended) The method of claim 1 further including obtaining from the mobile information apparatus payment information to administer payment for the output service that is selected.

7. (Currently amended) The method of claim 1 further including the mobile information apparatus discovering the one or more output devices to be available to render the data content.

8. (Currently amended) The method of 7 in which discovering the one or more output devices includes the mobile information apparatus broadcasting an output service request and awaiting one or more responses from the one or more output devices.

9. (Currently amended) The method of claim 7 in which discovering the one or more output devices includes the one or more output devices broadcasting information about the output services they provide and awaiting to be contacted by the mobile information apparatus.

10. (Cancelled) The method of claim 7 in which discovering the one or more output devices includes the information apparatus obtaining from a service node information about the one or more output devices.

11. (Original) The method of claim 7 in which the discovering of one or more output devices involves determining if the one or more output devices satisfy one or more output service requirements.

12. (Original) The method of claim 11 in which the one or more output service requirements include one or more of price, quality of service, and availability.

13. (Currently amended) The method of claim 7 in which the mobile information apparatus discovers the one or more output devices with wireless communication.

14. (Original) The method of claim 1 in which the attributes associated with the one or more output devices include information characterizing the one or more output devices.

15. (Original) The method of claim 14 in which the information characterizing the one or more output devices includes one or more of a make identifier, a model identifier, an output device type identifier, an output data format identifier, and an output device identifier.

16. (Original) The method of claim 1 in which the attributes associated with the one or more output devices include information characterizing output services provided by the one or more output devices.

17. (Original) The method of claim 16 in which the information characterizing the output services includes one or more of a quality of service indicator, an availability of service indicator and a service fee indicator.

18. (Original) The method of claim 1 in which the selecting of the one or more output devices includes input from a user.

19. (Currently amended) The method of claim 1 in which the selecting of the one or more output devices is based at least in part upon a predetermined default criterion that is stored in the mobile information apparatus.

20. (Currently amended) The method of claim 1 further including receiving at the mobile information apparatus via the communication channel components enabling the data content to be rendered by the selected one or more output devices.

21. (Original) The method of claim 20 in which the components include software code.

22. (Original) The method of claim 20 in which the components include a software application.

23. (Original) The method of claim 20 in which the components correspond to one or more of a device driver, a printer driver, an output driver, and a user interface.

24. (Currently amended) The method of claim 1 in which the mobile information apparatus includes one of a ~~mobile computing device, a pervasive device,~~ a digital camera, and a personal computer.

25. (Original) The method of claim 1 in which the one or more output devices include one or more of a printing device, a display device, and an audio output device.

26. (Currently amended) The method of claim 1 further including conforming at the mobile information apparatus the data content to an output data format compatible with the one or more selected output devices before

delivering the data content to the one or more selected output devices for rendering.

27. (Original) The method of claim 26 in which the conforming of the data content employs the one or more attributes.

28. (Original) The method of claim 26 in which conforming the data content includes at least partial raster image processing of the data content.

29. (Original) The method of claim 1 further including delivering the data content to an output controller before delivering the data content to the selected output device.

30. (Original) The method of claim 29 in which the output controller is one of a server, an external controller and a data access point.

31. (Original) The method of claim 29 further including performing raster image processing on the data content at the one or more selected output devices.

32. (Original) The method of claim 29 further including converting the data content into an output data compatible with the one or more selected output devices.

33. (Currently amended) A data output method for rendering at a selected output device data content accessed from ~~an~~ a mobile information apparatus, comprising:

establishing a communication channel between the mobile information apparatus and the selected output device, the communication channel including a radio frequency wireless communication channel at the mobile information apparatus;

receiving at the mobile information apparatus one or more components associated with the selected output device and enabling the data content to be rendered by the selected output device, the one or more components including an indication of an output data associated with the selected output device;

conforming at the mobile information apparatus the data content to the output data associated with the selected output device; and

delivering the output data to the selected output device for rendering.

34. (Cancelled) The method of claim 33 in which the communication channel includes a wireless communication channel.

35. (Currently amended) The method of claim 33 in which the data content resides in the mobile information apparatus.

36. (Currently amended) The method of claim 33 further including obtaining the data content from a data source distinct from the mobile information apparatus.

37. (Currently amended) The method of claim 33 further comprising obtaining authentication information from the mobile information apparatus and authenticating permission for the mobile information apparatus to access the selected output device.

38. (Currently amended) The method of claim 33 further including obtaining from the mobile information apparatus payment information to administer payment for rendering service provided at the selected output device.

39. (Currently amended) The method of claim 33 further including the mobile information apparatus discovering the selected output device to be available to render the data content.

40. (Currently amended) The method of claim 39 in which discovering the selected output device includes the mobile information apparatus broadcasting an output service request and awaiting a response from the selected output device.

41. (Currently amended) The method of claim 39 in which discovering the selected output device includes the selected output device broadcasting information about its availability and awaiting to be contacted by the mobile information apparatus.

42. (Cancelled) The method of claim 39 in which discovering the selected output device includes the information apparatus obtaining from a service node information about one or more output devices.

43. (Original) The method of claim 39 in which the discovering of the selected output device involves determining if the selected output device satisfies one or more output service requirements.

44. (Original) The method of claim 43 in which the one or more output service requirements include one or more of price, quality of service, and availability.

45. (Currently amended) The method of claim 39 in which the <u>mobile</u> information apparatus discovers the selected output device with wireless communication.

46. (Original) The method of claim 33 in which the one or more components are stored in the one or more output devices.

47. (Original) The method of claim 33 in which the one or more components are stored in one or more output controllers associated with the output devices.

48. (Original) The method of claim 33 in which the one or more components include at least part of a printer driver.

49. (Original) The method of claim 33 in which the one or more components include software code.

50. (Original) The method of claim 33 in which the one or more components include one or more device dependent parameters relating to the selected output device.

51. (Original) The method of claim 33 in which the one or more components relate to one or more of a device driver, a printer driver, an output driver, and a user interface.

52. (Original) The method of claim 33 in which the one or more components include a software application.

53. (Currently amended) The method of claim 33 further including selecting at the <u>mobile</u> information apparatus the selected output device from among plural output devices based on one or more selection criteria.

54. (Original) The method of claim 53 in which the one or more selection criteria are obtained from a user.

55. (Currently amended) The method of claim 53 in which the one or more selection criteria are automatically defined based on a predetermined default stored on the <u>mobile</u> information apparatus.

56. (Original) The method of claim 33 in which conforming the data content includes performing raster image processing on the data content.

57. (Original) The method of claim 33 further including performing raster image processing on the output data at the selected output device.

58. (Original) The method of claim 33 further including converting the output data into a form compatible to one of an output engine, a printer engine, an output controller, and a printer controller.

59. (Original) The method of claim 33 in which the conformed data content is further processed in an output controller associated with the selected output device before being delivered to the selected output device.

60. (Currently amended) The method of claim 33 in which the mobile information apparatus includes one of a mobile computing device, a pervasive device, a digital camera, and a personal computer.

61. (Original) The method of claim 33 in which the output device includes one of a printing device, a display device, and an audio output device.

62. (Original) The method of claim 33 in which the output data includes compressed data.

63. (Currently amended) In a computer readable medium, data output software for rendering at one or more output devices data content accessed from an a mobile information apparatus, comprising:

software for establishing a communication channel between the mobile information apparatus and the one or more output devices, the communication channel including a radio frequency wireless communication channel at the mobile information apparatus;

software for receiving at the mobile information apparatus over the communication channel one or more attributes corresponding to the one or more output devices;

software for selecting at the mobile information apparatus the one or more output devices for rendering the data content based at least in part on the one or more attributes; and

software for delivering the output data to the one or more selected output devices for rendering.

64. (Currently amended) The medium of claim 63 further including software for conforming at the <u>mobile</u> information apparatus the data content in accordance with the one or more attributes before delivering the data content to the one or more selected output devices for rendering.

65. (Currently amended) In a computer readable medium, data output software for rendering at a selected output device data content accessed from ~~an~~ <u>a mobile</u> information apparatus, comprising:

software for establishing a communication channel between the <u>mobile</u> information apparatus and the selected output device<u>, the communication channel including a radio frequency wireless communication channel at the mobile information apparatus</u>;

software for receiving at the <u>mobile</u> information apparatus one or more components associated with the selected output device and enabling the data content to be rendered by the selected output device, the one or more components including an indication of an output data associated with the selected output device;

software for conforming at the <u>mobile</u> information apparatus the data content to the output data associated with the selected output device; and

software for delivering the output data to the selected output device for rendering.

66. (Currently amended) A data output method for rendering at one or more output devices associated with a selected output system data content accessed from ~~an~~ <u>a mobile</u> information apparatus, comprising:

establishing a communication channel between the <u>mobile</u> information apparatus and the selected output system<u>, the communication channel including a radio frequency wireless communication channel at the mobile information apparatus</u>;

receiving at the <u>mobile</u> information apparatus over the communication channel one or more attributes corresponding to the one or more output devices associated with the output system;

selecting at the <u>mobile</u> information apparatus one or more output devices for rendering the data content based at least in part on the one or more attributes; and

delivering the data content to the selected output system for rendering at the selected one or more output devices.

67. (Currently amended) The method of claim 66 further including conforming at the <u>mobile</u> information apparatus the data content in accordance with the one or more attributes before delivering the data content to the one or more selected output devices for rendering.

68. (Cancelled) The method of claim 66 in which the communication channel includes a wireless communication channel.

69. (Original) The method of claim 66 in which the selected output system includes a network.

70. (Original) The method of claim 66 in which the selected output system includes at least one output device and at least one output controller.

71. (Currently amended) The method of claim 66 in which an output controller in the selected output system communicates with the <u>mobile</u> information apparatus.

72. (Original) The method of claim 71 in which the output controller is associated with one or more output devices.

73. (Original) The method of claim 71 in which the output controller is one of a server, an external controller and a data access point.

74. (Original) The method of claim 71 in which the output controller receives the data content.

75. (Original) The method of claim 74 in which the output controller performs raster image processing on the data content.

76. (Original) The method of claim 74 further including converting the data content into a form compatible to the selected one or more output devices.

77. (Original) The method of claim 74 further comprising the output controller delivering the data content to the selected one or more output devices.

78. (Currently amended) A data output method for rendering at an output device associated with a selected output system data content accessed from ~~an~~ a mobile information apparatus, comprising:

establishing a communication channel between the mobile information apparatus and the selected output system, the communication channel including a radio frequency wireless communication channel at the mobile information apparatus;

receiving at the mobile information apparatus one or more components from the selected output system and enabling the data content to be rendered by the output device associated the selected output system;

conforming at the mobile information apparatus the data content to an output data with the one or more components; and

delivering the output data to the selected output system for rendering by the output device.

79. (Cancelled) The method of claim 78 in which the communication channel includes a wireless communication channel.

80. (Original) The method of claim 78 in which the selected output system includes a network.

81. (Original) The method of claim 78 in which the selected output system includes at least one output device and at least one output controller.

82. (Currently amended) The method of claim 78 in which an output controller associated with the selected output system communicates with the mobile information apparatus.

83. (Original) The method of claim 82 in which the output controller is one of a server, an external controller and a data access point.

84. (Original) The method of claim 82 in which the output controller receives the output data.

85. (Original) The method of claim 82 in which the output controller performs raster image processing on the output data.

86. (Original) The method of claim 84 further including converting the output data into a form compatible to the output devices.

87. (Original) The method of claim 84 further comprising the output controller delivering the output data to the output devices.

88. (Original) The method of claim 78 in which the one or more components are stored in one or more output controllers associated with the output devices.

89. (Original) The method of claim 78 in which the one or more components include at least part of a printer driver.

90. (Original) The method of claim 78 in which the one or more components include software code.

91. (Original) The method of claim 78 in which the one or more components include one or more device dependent information or parameter relating to the selected output device.

92. (Original) The method of claim 78 in which the one or more components relate to one or more of a device driver, a printer driver, an output driver, and an user interface.

93. (Original) The method of claim 78 in which the one or more components include information characterizing an output service provided by the selected output system.

94. (Original) The method of claim 78 in which the one or more components include a software application.

95. (Currently amended) The method of claim 78 in which the mobile information apparatus includes one of a mobile computing device, a pervasive device, a digital camera, and a personal computer.

96. (Original) The method of claim 78 in which the output device includes one of a printing device, a display device, and an audio output device.